

Pentajeez

by Arya Akhavan (January 2013)

Angles for R.I. = 1.610

246 + 30 girdles = 276 facets

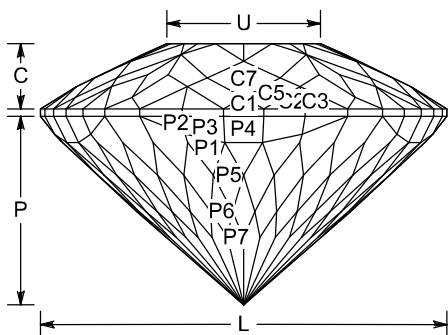
15-fold, mirror-image symmetry

120 index

L/W = 1.016 T/W = 0.387 U/W = 0.385

P/W = 0.471 C/W = 0.163

Vol./W³ = 0.220



PAVILION		
P1	44.50°	120-004-008-012-016-020-024-028-032-036-040-044-048-052-056-060-064-068-072-076-080-084-088-092-096-100-104-108-112-116
G1	90.00°	012-036-060-084-108
G2	90.00°	004-020-028-044-052-068-076-092-100-116
G3	90.00°	002-022-026-046-050-070-074-094-098-118
G4	90.00°	120-024-048-072-096
P2	62.52°	004-020-028-044-052-068-076-092-100-116
P3	62.91°	002-022-026-046-050-070-074-094-098-118
P4	63.03°	120-024-048-072-096
P5	43.00°	002-006-010-014-018-022-026-030-034-038-042-046-050-054-058-062-066-070-074-078-082-086-090-094-098-102-106-110-114-118
P6	42.00°	120-004-008-012-016-020-024-028-032-036-040-044-048-052-056-060-064-068-072-076-080-084-088-092-096-100-104-108-112-116
P7	41.00°	002-006-010-014-018-022-026-030-034-038-042-046-050-054-058-062-066-070-074-078-082-086-090-094-098-102-106-110-114-118

CROWN		
C1	34.87°	120-024-048-072-096
C2	34.87°	002-022-026-046-050-070-074-094-098-118
C3	34.87°	004-020-028-044-052-068-076-092-100-116
C4	34.87°	012-036-060-084-108
C5	33.23°	001-023-025-047-049-071-073-095-097-119
C6	29.15°	008-016-032-040-056-064-080-088-104-112
C7	31.59°	120-024-048-072-096
C8	27.12°	012-036-060-084-108
C9	25.99°	006-018-030-042-054-066-078-090-102-114
C10	25.00°	005-019-029-043-053-067-077-091-101-115
C11	21.41°	008-016-032-040-056-064-080-088-104-112
C12	22.91°	003-021-027-045-051-069-075-093-099-117
T	0.00°	Table

This originally started out as a project to re-write Marco's "Mikan" design for a pentagonal barion. No matter what I did, I couldn't write a good design in quartz, so I switched it to topaz and added over 100 more facets. Works with no changes in materials from topaz to YAG (RI = 1.61 - 1.83). Can be tweaked in GemRay. Suggested width = 15-30 mm
C:\Users\Arya\Desktop\Pictures\Designs (Mine)\Works in Progress\Pentajeez.gem